

What is claimed is:

1. A test strip comprising:
a support carrying an active electrode and a counterelectrode; a layer
of a mesh or membrane material within which a small volume of liquid to be
5 tested can be distributed and provide contact between said active electrode and
said counter electrode, and wherein an analyte-specific reagent is coated on
said material or on one of said electrodes; and
which includes a sample application area at one edge of the mesh or
membrane.
- 10 2. The test strip according to claim 1, wherein said reagent is at least one
component of a redox reaction.
3. The test strip according to claim 2, wherein said at least one component
is one or more of an enzyme, a mediator and/or co-factor for the enzyme.
4. The test strip according to claim 2, wherein said at least one component
15 comprises an enzyme.
5. The test strip according to claim 4, wherein said enzyme is selected from
the group consisting of glucose oxidase and glucose dehydrogenase.
6. The test strip according to claim 1, wherein said material is a
monofilament mesh or membrane.
- 20 7. The test strip according to claim 1, which additionally comprises a spacer
layer deposited over said electrodes.
8. The test strip according to claim 7, wherein said mesh or membrane
material is a monofilament mesh coated with a surfactant or chaotropic agent,
the mesh being laid over the reagent, the reference electrode and the spacer
25 layer; and wherein the test strip additionally comprises a second
non-conductive layer, adhered to the mesh layer, but not coextensive therewith,
thereby providing a sample application area at one edge of the mesh.
9. The test strip according to claim 1, wherein said reagent is free of filler
having both hydrophobic and hydrophilic surface regions
- 30 10. The test strip according to claim 8, wherein said mesh is additionally
coated with a cell lytic agent.

- 11 The test strip according to claim 10, wherein said cell lytic agent is selected from the group consisting of digitonin, saponin, DNMG and combinations thereof.
- 12 The test strip according to claim 1, wherein said electrodes comprise
5 graphite particles, carbon particles and a polymer binder.
- 13 The test strip according to claim 12, wherein the graphite particles have an average size of 1-20 μm and a surface area of 1-50 m^2/g , and the carbon particles have an average size of 5-70 nm and a surface area of less than 150 m^2/g .
- 10 14 The test strip according to claim 1, in combination with means for obtaining a sample, such that the obtained sample passes directly to the sample application area.
- 15 15 A method for testing a liquid for the presence of an analyte, which comprises contacting the liquid with a test strip according to claim 1, and detecting the current.
- 16 The method according to claim 15, wherein the liquid is blood and the analyte is glucose.
- 17 A flexible tape of a material within which liquid can be distributed and on which are coated discrete areas of at least one component of a redox reaction.
- 20 18 The flexible tape according to claim 17, wherein the material is a monofilament mesh or membrane.
- 19 A container containing a wound tape according to claim 17, and optionally also comprising automatic dispensing means.